

TSG RAN Meeting #27
Tokyo, Japan, 9 - 11 March 2005

RP-050140

Title CR (Rel-6 Category F) to TS25.214 for DL/UL timing association of E-DCH operation
Source QUALCOMM Europe, Nortel Networks, Ericsson, Samsung, Panasonic
Agenda Item 9.6

RAN1 Tdoc	Spec	CR	Rev	Rel	Cat	Current Version	Subject	Work item	Remarks
	25.214	369	3	Rel-6	F	6.4.0	DL/UL timing association of E-DCH operation	EDCH-Phys	

CHANGE REQUEST

⌘ **25.214 CR 369** ⌘ rev **3** ⌘ Current version: **6.4.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: | UICC apps ME Radio Access Network Core Network

Title:	⌘ DL/UL timing assoication of E-DCH operation		
Source:	⌘ QUALCOMM Europe, Nortel Networks, Ericsson, Panasonic, Samsung		
Work item code:	⌘ EDCH-Phys	Date:	⌘ 2/18/2005
Category:	⌘ F Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Release:	⌘ Rel-6 Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ DL/UL timing assoicaiton for E-DCH operation is unspecified		
Summary of change:	⌘ Adding missing specification text		
Consequences if not approved:	⌘ Can not operate E-DCH		

Clauses affected:	⌘ 6B										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> Other core specifications ⌘ Test specifications O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Y	N										
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Other comments:	⌘										

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6B E-DCH related procedures

The following physical layer parameters are signalled to the UE from higher layers:

- 1) E-HICH set to be monitored
- 2) E-RGCH set to be monitored

6B.1 E-DCH control timing

6B.1.1 10 ms E-DCH TTI

For each cell in the E-DCH active set, the UE shall associate the control data received in the E-HICH frame associated with SFN i to the data transmitted in the E-DCH frame associated with SFN $i-3$.

The UE shall apply the control data received in the serving cell E-RGCH frame associated with SFN i to the E-DCH frame associated with SFN $i+1$.

The UE shall start using any control data received in any E-RGCH frame from a non serving cell as early as possible, but no later than 12 ms after the control data has been received.

The UE shall start using any control data received in any E-AGCH frame as early as possible but no later than 12 ms after the control data has been received.

6B.1.2 2 ms E-DCH TTI

For each cell in the E-DCH active set, the UE shall associate the control data received in sub-frame j of the E-HICH frame associated with SFN i to sub-frame t of the E-DCH frame associated with SFN $i-s$ where:

$$s = 1 - \lfloor j/3 \rfloor, \text{ and } t = (j+2) \bmod 5$$

The UE shall apply the control data received from the serving cell in E-RGCH sub-frame j of the frame associated with SFN i to sub-frame j of the E-DCH frame associated with SFN $i+1$.

The UE shall apply the control data received from the serving cell in E-AGCH sub-frame j of the frame associated with SFN i to sub-frame t of the E-DCH frame associated with SFN $i+s$ where:

$$s = \left\lfloor \frac{\left\lceil \frac{30j+100 - (t_{DPCH,n}/256)}{30} \right\rceil}{5} \right\rfloor, \text{ and } t = \left\lceil \frac{30j+100 - (t_{DPCH,n}/256) - 150s}{30} \right\rceil$$

In non RG mode, the UE shall start using any control data received in any E-AGCH frame as early as possible but no later than 4 ms after the control data has been received.

The UE shall start using any control data received in any E-RGCH frame from a non serving cell as early as possible but no later than 4 ms after the control data has been received.